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VIA FAX AND MAIL (including 11 pages in total)

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March 25, 2004

European Patent Application No.: PCT/IB02/02423
Nokia Corporation et al.

Our ref: WO 33715

(Frist: 6.4. Eing.)

Reference is made to the written opinion under Rule 66 PCT,
dated February 6, 2004.

Enclosed herewith, new claims 1-13 are filed.

These claims 1-13 are based on the original claims 1-13
respectively.Amendments:

Claim 1 was amended on the one hand by merely shifting the feature part "by said authentication/authorisation server (AA-S)" within the claim as such. On the other hand, based on the disclosure of page 6, lines 12-21 and page 7, line 34 to page 8, line 6 of the original application, claim 1 was amended by clarifying the remaining feature that a specific accounting server out of several possible ones is indicated, dependent on the user.

Dresdner Bank, München	Kto. 3939 844	BLZ 700 800 00	IBAN-Nr.: DE47 7008 0000 0393 9844 00	BIC : DRES DE FF 700
Deutsche Bank, München	Kto. 2861 060	BLZ 700 700 24	IBAN-Nr.: DE14 7007 0024 0286 1060 00	BIC : DEUT DE DB MUC
Postbank, München	Kto. 6704 3804	BLZ 700 100 80	IBAN-Nr.: DE04 7001 0080 0067 0438 04	BIC : PBNK DE FF
Mizuho Corp. Bank, Düsseldorf	Kto. 810 423 3007	BLZ 300 207 00	IBAN-Nr.: DE75 3002 0700 8104 2330 07	BIC : MHCB DE DD
UFJ Bank Limited, Düsseldorf	Kto. 500 047	BLZ 301 307 00	IBAN-Nr.: DE09 3013 0700 0000 5000 47	BIC : SANW DE DX
Steuernr. : 9 148/641/28007	Ust-ID/VAT : DE 1307 480 35			

The remaining amendments throughout claims 2-13 concern claims 3, 5, and 6 and are mere editorial amendments and/or adaptations to the amendments introduced to claim 1.

The Examiner is respectfully requested to reconsider his previously raised objections vis-à-vis the now amended main claim, which is strongly considered to be allowable in terms of novelty as well as inventive step involved having regard to the prior art documents D1 to D3 cited by the Examiner.

When comparing the disclosure of document D1 with the claimed arrangement of original claim 1, it appears that the mobile node 1010 corresponds to the user, the AAAF server 1022 corresponds to AAA-C, the AAAH server 1012 corresponds to AA-S and that the AAAy server 1032, located at a "shop" for example, might correspond to an accounting server denoted by ACC-1 or ACC-2 according to the definition of the present application.

The original claim 1 as examined recited a feature of "indicating an accounting server for the user." According to the present invention, this is to be understood in the sense of "a server for the user" (i.e. a server selected dependent on the user). However, the Examiner appears to have understood this claim feature in that "the indication is for the user" (i.e. provided to the user). This seems to be possible to be backed by the Examiner's analysis that document D1 confirms accounting by sending a confirmation to the user (see section [104] of document D1). This disclosure of document D1 is mapped by the Examiner to the (misinterpreted) analysis that according to the claimed invention there is a sending of an indication to the user on an accounting server (see second page of the Examiner's reasoning last paragraph, starting after "see paragraph [0104]").

However, the undersigned respectfully disagrees with the Examiner. Rather, according to the present invention, the user as such is not informed of an accounting server used. Namely, using an accounting server for a specific user is transparent to the user. According to the present invention, dependent on the user, a different accounting server is selected (see the above-cited passages of the original disclosure).

Also, the present invention starts from an assumption of a different architectural principle underlying the entire arrangement. Namely, different accounting servers are present for different charging principles such as prepaid charging or post-paid charging (using a CDR, call detail record). Thus, which charging principle is applied for the same service such as telephony services is dependent on the user, more precisely the user profile.

In contrast thereto, for a specific service such as buying at a specific shop being provided with the AAAy server 1032, always this AAAy server is used as the accounting server (irrespective of its possible different location) and also irrespective of the user accessing this shop/service. A different AAAy server is only used if it is located/associated at a different shop. However, in such a case, another server is only used dependent on the service used, but for a respective service (the same shop) the AAAy server is fixed for all users using the service/accessing the services of the shop. For the above reasons, it is held that the new claim 1 sufficiently distinguishes from this prior art document.

In addition thereto, as a further support of the above analysis regarding the new claim 1, e.g. claim 5 specifies that the indication is not transmitted to the user but to the client AAA-C. With reference to Figure 13 of document D1 this would correspond to a transmission from the AAAH server to AAAF of an "indication of server to be used for accounting".

However, what is transferred according to the disclosure of document D1 between the AAAH server to the mobile node/user is the result of accounting for confirmation by the user (see section [104] of document D1).

However, this transmission of the result of accounting is different from an indication of which accounting server is to be used for the reason that different stages of an accounting procedure are concerned. Apart therefrom, the result would have to be transferred to the AAAF. However, the result is transparent to the AAAF according to document D1 because the AAAF cannot confirm the payment/transaction to be paid in the accounting. Such a confirmation is only possible for the user accessing the service/shop.

Furthermore, as briefly outlined above, claim 3 was clarified based on a remark of the Examiner on the last page of his reasoning, claim 5 was clarified to be in line with the amended claim 1, and also claim 6 was amended to be in line with the amended claim 1. The remaining claims were left unamended.

In addition, it is held that the new claim 1, in view of the above arguments is also sufficiently distinguished from the disclosure of document D2. In detail, document D2 merely concerns a method of negotiating reporting mechanisms and then sending accounting records to an accounting server such as a home RADIUS server utilizing the RADIUS protocol. The disclosure of document D2 merely mentions that containers of accounting records are sent to the home RADIUS server in accordance with the preferred recording method and in an alternative embodiment, the containers of accounting records are sent to the home RADUIS server at a preconfigured interval.

However, there is no mention at all to send any accounting records to another than the home RADIUS server. Thus, no

selection of an accounting server dependent on the user is perceptible from the disclosure of document D2.

Substantially similar arguments apply to the disclosure of document D3.

Reconsideration of the present application in the light of the above arguments in combination with the amended claims as presented to file is therefore respectfully requested.

The competent international Examiner will thus appreciate that the claimed subject-matter is novel and based on an inventive step vis-à-vis the prior art according to documents D1, D2, and/or D3, whether considered alone or taken in any combination.

Thus, a positive international preliminary report on patentability under chapter 2 PCT is respectfully requested to be issued as the next procedural step.

Jürgen Faller
Patentanwalt
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Enclosures:

- Claims 1 to 13
- Claim amendment sheet

Enclosure of March 25, 2004

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10 **Claims**

1. A method of providing an accounting service in a mobile communication system, comprising the steps of:

15 accessing (**M1**, **M2**) a chargeable functionality of said communication system by a user (**U**), by

authenticating said user (**U**) by a authentication/authorization server (**AA-S**), and

20 authorizing said access of said user (**U**) by said authentication/authorization server (**AA-S**); and

indicating (**M2**), by said authentication/authorization server (**AA-S**), a specific accounting server (**ACC-1**) out of several possible ones (ACC-1, ACC-2) dependent on the user (**U**), wherein

25 said accounting server (**ACC-1**) is physically separated from said authentication/authorization server (**AA-S**).

30 2. A method according to claim 1 wherein said authentication/authorization server is in a home network of said user.

35 3. A method according to claim 1, wherein said chargeable functionality is a service provided in a visited network of said mobile communication system.

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4. A method according to claim 1, wherein said chargeable functionality is a service of said mobile communication system.
5. A method according to any one of claims 1 to 4, wherein said accessing step is performed by sending an authentication/authorization request message (**M1**) from an authentication/authorization client (**AAA-C**) to which said user (**U**) is currently attached to said authentication/authorization server (**AA-S**) which replies by sending an authentication/authorization answer message (**M2**) to said authentication/authorization client (**AAA-C**), and wherein said answer message (**M2**) includes said indication of said specific accounting server (**ACC-1**) for said user (**U**).
6. A method according to any one of claims 1 to 5, wherein said authentication/authorization server directly indicates said specific accounting server to said authentication/authorization client, which specific accounting server is handling said user and keeps a corresponding account.
7. A method according to any one of claims 1 to 6, comprising the further step of requesting (**M3**) an accounting for said chargeable functionality from said indicated accounting server (**ACC-1**) by said authentication/authorization client (**AAA-C**).
8. A method according to claim 7, wherein, during said accessing step, said authentication/authorization client receives a ticket indicating that said user has been granted to access said chargeable functionality, and said ticket is sent to said accounting server.

9. A method according to claim 8, wherein said accounting server checks whether accounting for said user is to be started.

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10. A method according to claim 8, wherein said ticket contains at least one of the information of the group of: to which user it belongs, when the access was granted, for how long the access was granted, and from which client the
10 access was granted.

11. A method according to claim 8 to 10, wherein said ticket is signed by the authentication/authorization server so that it is verified to the accounting server that the
15 authentication/authorization server really has made the ticket.

12. A system for providing an accounting service comprising means adapted to perform a method according to any of the
20 claims 1-11.

13. An accounting server device comprising means adapted to perform respective steps of a method according to any of the claims 1-11.

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10 **Claim amendment sheet**

1. A method of providing an accounting service in a mobile communication system, comprising the steps of:

15 accessing (**M1, M2**) a chargeable functionality of said communication system by a user (**U**), by

authenticating said user (**U**) by a authentication/authorization server (**AA-S**), and

authorizing said access of said user (**U**) by said

20 authentication/authorization server (**AA-S**); and

indicating (**M2**), by said authentication/authorization server (**AA-S**), a specific ~~an~~-accounting server (**ACC-1**) out of several possible ones (ACC-1, ACC-2) ~~for~~dependent on the user (**U**) ~~by~~ ~~said authentication/authorization server~~

25 (**AA-S**), wherein

2. A method according to claim 1 wherein said authentication/authorization server is in a home network of said user.

3. A method according to claim 1, wherein said chargeable functionality is a service provided in a visited network of said mobile communication system.

4. A method according to claim 1, wherein said chargeable functionality is a service of said mobile communication system.
5. A method according to any one of claims 1 to 4, wherein said accessing step is performed by sending an authentication/authorization request message (**M1**) from an authentication/authorization client (**AAA-C**) to which said user (**U**) is currently attached to said authentication/authorization server (**AA-S**) which replies by sending an authentication/authorization answer message (**M2**) to said authentication/authorization client (**AAA-C**), and wherein said answer message (**M2**) includes said indication of said specific accounting server (**ACC-1**) for said user (**U**).
6. A method according to any one of claims 1 to 5, wherein said authentication/authorization server directly indicates said specific accounting server to said authentication/authorization client, which specific accounting server is handling said user and keeps a corresponding account.
7. A method according to any one of claims 1 to 6, comprising the further step of requesting (**M3**) an accounting for said chargeable functionality from said indicated accounting server (**ACC-1**) by said authentication/authorization client (**AAA-C**).
8. A method according to claim 7, wherein, during said accessing step, said authentication/authorization client receives a ticket indicating that said user has been granted to access said chargeable functionality, and said ticket is sent to said accounting server.

9. A method according to claim 8, wherein said accounting server checks whether accounting for said user is to be started.

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10. A method according to claim 8, wherein said ticket contains at least one of the information of the group of: to which user it belongs, when the access was granted, for how long the access was granted, and from which client the access was granted.

11. A method according to claim 8 to 10, wherein said ticket is signed by the authentication/authorization server so that it is verified to the accounting server that the

15 authentication/authorization server really has made the ticket.

12. A system for providing an accounting service comprising means adapted to perform a method according to any of the
20 claims 1-11.

13. An accounting server device comprising means adapted to perform respective steps of a method according to any of the claims 1-11.

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